REMARKS

Reconsideration of this application is respectfully requested.

Claims 1-13, 16-22 and 24-25 were rejected under 35 U.S.C. 102(e) as being anticipated by Wells (US 6,257,337). In view of this ground of rejection, claims 1 and 2 have been canceled herewith and certain of the remaining claims have been amended herewith to establish clear and patentable distinction over Wells. Wells discloses a riser connecting a floating drilling rig with a subsea wellhead for permitting well drilling and completion operations, including circulation return of drilling fluid and containment of pressurized well fluid during well drilling and completion activities. The marine riser 4 of Wells comprises a plurality of riser sections being connected at joint connections 30. Floatation collars composed of a plurality of gas impermeable walls for a particular riser pipe section are mounted to the joint connection of the riser joint immediately below it, thus minimizing the potential for movement of the flotation collars along the length of the riser sections when the flotation collars are located beneath the sea surface. The gas impermeable walls are preferably composed of urethane coated polyester, woven type, urethane coated Nylon, woven type or aramid fabric such as Kevlar. The walls may also be composed of metal or foam materials if desired. The cells of the flotation collars of Wells are inflated with a gas, such as air, nitrogen, helium, etc. to develop a buoyancy force that counteracts the weight or deck load of the riser string.

It is clear that Wells does not anticipate claim 3; thus claim 3 has been amended herewith to independent form, including all of the limitations of claim 1. Referring to column 4, lines 56-57, Wells discloses that the sidewalls of the buoyancy chamber (or cell) could be constructed of foam or metal. Wells does not disclose inflating the buoyancy chamber with an uncured essentially liquid polymer foam material which subsequently cures to a substantially solid

condition, as called for in now independent claim 3. Thus, it is respectfully submitted that claim 3, as amended herewith, establishes clear and patentable distinction over the teachings of Wells.

Regarding claim 4, it is clear that Wells does not disclose the method step of introducing a liquid composition into the buoyancy chamber to serve as ballast as recited in claim 4. Thus, the subject matter of claim 4 is allowable. To further distinguish claim 4, the claim has been amended herewith to independent form, including all of the limitations of its parent claim 1. Reconsideration of claim 4 as presented herewith is therefore respectfully requested.

It is also clear that Wells does not anticipate the originally claimed subject matter of claim 5. Wells does not disclose moving the marine riser and deflated buoyancy chamber through a marine structure opening, and subsequently inflating the buoyancy chamber to a dimension greater than the size of the marine structure opening as specified in original claim 5. Referring to column 5, lines 32-35, Wells discloses positioning the inflatable collar around the riser section after the riser section is lowered to a position beneath the drilling rig main deck. Therefore, the inflatable collar of Wells is not moved through a marine structure opening before it is inflated. Furthermore, Wells is completely silent as to the relative size of the inflated collar and the marine structure opening. It is clear that each floatation collar of Wells is opened longitudinally at the split 14, is placed about a desired section of the previously installed riser and attached to a desired coupling of the riser by a metal collar 32 and straps 8. The floatation collar for a particular riser pipe section is secured to the upper pipe collar of the next lower riser pipe section, so that the floatation collar will not move upwardly along the riser string when it is inflated. The dimension of the floatation collar of Wells is not related to the dimension of the deck opening of the floating vessel, but rather is described as being attached to the riser at a

location below the deck of the drilling rig. Claim 5 has been rendered to independent form, including all of the limitations of claim 1 and thus is now in condition for allowance.

Claim 6 has been amended herewith by making it dependent from claim 5. Thus, claim 6 now incorporates the combined subject matter of claims 1 and 5 and accordingly is deemed to be allowable as presented herewith.

It is respectfully submitted that Wells does not anticipate claim 7. Wells does not disclose selectively inflating a plurality of buoyancy modules, as required by claim 7. Referring to column 5, lines 20-25, Wells discloses a compressor 34 and a single fluid flow line 36 for providing buoyant gas to the floatation collar(s). Wells is silent as to selectively inflating individual collars, and does not disclose any means for doing so. Referring to column 2, lines 53-55, the amount of buoyancy in the Wells device is adjusted by varying the number and/or size of the inflation collars that are used, rather than by adjusting the degree of inflation in the individual collars themselves. Moreover, according to the scope of the claim, adjusting the buoyancy of the individual floatation devices can be accomplished by the degree of inflation and by the amount of liquid ballast that can be employed. Thus, the same size floatation devices can provide different degrees of floatation force along the length of the riser if desired. This feature is not taught or inherently suggested by Wells. Claim 7 has been amended herewith to independent form, including all of the limitations of original claim 1. Thus, it is respectfully submitted that claim 7 is allowable as presented herewith.

It is also clear that Wells does not anticipate the originally claimed subject matter of claim 8. Wells does not disclose selectively inflating a plurality of buoyancy modules, as required by claim 8. Referring to column 5, lines 20-25, Wells discloses a compressor 34 and a single fluid flow line 36 for providing buoyant gas to the floatation collar(s). Wells is silent as to

selectively inflating individual collars, and does not disclose any means for doing so. Furthermore, Wells does not disclose applying a buoyancy force to the upper end of the marine riser, as required by claim 8. Wells discloses floatation collars, which apply a buoyancy force to the riser section immediately below each respective collar. Therefore, the floatation collars disclosed by Wells apply buoyancy forces at distinct points along the riser, defined by the connection collars of the riser string, rather than at the upper end of the riser. Claim 8 has been amended herewith to independent form, including all of the limitations of original claim 1, and is thus rendered allowable as presented herewith.

It is clear that Wells does not anticipate the originally claimed subject matter of claim 9. Wells does not disclose selectively inflating a plurality of buoyancy modules, as required by claim 9. Referring to column 5, lines 20-25, Wells discloses a compressor and a single fluid flow line 36 for providing buoyant gas to all of the floatation collars, whether one or more, obviously intending that each of the inflation collars be provided with floatation gas at substantially the same pressure. According to the method recited in claim 9, which has been amended herewith to independent form, including all of the limitations of original claim 1, the buoyancy modules are capable of being selectively inflated, with the resulting buoyancy thereof being controlled by gas inflation or by both gas inflation and by liquid ballast. The inflation collars of the Wells system do not have this capability.

Claim 10 has been amended herewith to incorporate the subject matter of claims 1 and 5, by being made dependent from now independent claim 5. Thus, claim 10 is deemed to be allowable over the teachings of Wells in the same matter as discussed above in connection with claim 5 and further because of the additional method limitations of claim 10, with respect to controllably introducing inflation gas from said gas supply into the inflation chambers and

inflating the buoyancy modules to the desired extent. It is therefore respectfully submitted that claim 10 is allowable as presented herewith.

Wells does not anticipate claim 11 as originally filed. Wells does not disclose a buoyancy module having a deflated dimension enabling its movement through a deck opening of a marine structure and an inflated condition of greater dimension as compared to the deck opening, as recited in claim 11. The inflation collars of Wells are not moved through a marine structure opening during installation, but rather are assembled to the riser sections beneath the deck of the floating drilling rig, such as in the moon pool area. The longitudinal split 6 of the collars is designed to allow the collars to be assembled transversely to the riser pipe after the riser pipe has been lowered to a position below the drilling rig main deck (See column 1, lines 64-66, column 2, lines 44-56, column 5, lines 29-38). It is respectfully submitted that claim 11 is allowable as presented herewith.

Claims 12 and 13 are ultimately dependent from claim 11 and are thus allowable along with claim 11.

Claims 14 and 15 are also dependent from claim 11 and are thus allowable for the same reasons as discussed above in connection with claims 11-13. Additionally, claim 14 introduces the limitation of passing the inflatable buoyancy module through the riser opening of the drilling rig deck structure, a feature that is not suggested or implied by the teachings of Wells. Claim 15 additionally recites specific features of the construction of the buoyancy module, which are not taught or inherently suggested by Wells. Thus claim 15 is allowable as presented herewith, along with claims 11-14.

Claims 16-21 are ultimately dependent from claim 11 and add combinations of limitations, such as the inflation gas supply of claims 16-18, the buoyancy module construction

of claim 19, the uncured polymer inflation medium of claims 20 and 21, that are not taught by Wells. Accordingly, it is respectfully submitted that claim 16-21 are allowable as presented herewith.

It is clear that Wells does not anticipate claim 22. Wells does not disclose a pressure tight envelope having a deflated diameter less than the diameter of a working opening in a spar, permitting passage thereof through the working opening of the spar along with a riser, as the riser is being installed, and inflated to a dimension greater than the diameter of the working opening. The inflatable floatation collar of Wells is not moved through a deck opening along with the riser during its installation, but rather is installed to riser sections beneath the deck of the drilling rig. Wells is completely silent as to the relative size of the inflated collar and the marine structure deck opening. Allowance of claim 22 is therefore respectfully requested.

Claim 23 is dependent from claim 22 and therefore includes all of the limitations of claim 22. Additionally, the claim recites the further limitation of riser stop structure and upper and lower module travel stops of a longitudinal tubular element of the floatation modules that are disposed for contact with the riser stop structure, to establish and maintain desired positioning of the buoyancy modules on the riser. Clearly, Wells does not disclose or suggest these specifically recited features.

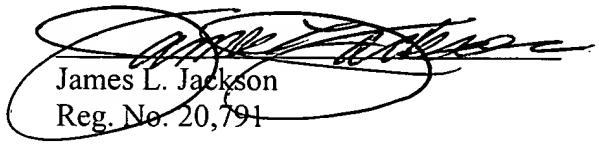
Claims 24 and 25 are dependent from claim 22 and thus are allowable for the same reasons as discussed above in connection with claim 22. Additionally, claims 24 and 25 further specifically recite features of the inflatable buoyancy modules that are not taught or suggested by the teachings of Wells. Claim 24 recites the longitudinal tubular element as having upper and lower travel stops for contact with riser stop structure, which are not taught by Wells. Claim 25 defines at least one buoyancy module access port and recites an inflation gas supply being

connected to the access port of each of the inflatable buoyancy modules for introducing pressurized gas for inflation and for removing inflation gas for buoyancy module deflation, features that are not present in the floatation collar devices of Wells.

In view of the foregoing, it is respectfully submitted that remaining claims 3-25 of the present application are allowable for the foregoing reasons. Accordingly, allowance of the present application and subsequent grant of Letters Patent is respectfully solicited.

No fees are believed to be due in connection with the filing of this Response to Office Action; however, should any fees be deemed necessary for any reason relating to this response, the Director is hereby authorized to deduct said fees from our Deposit Account No. 50-0897 (FMC029/131935).

Respectfully submitted,



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